AMENDMENT

In the claims:

1. (Currently Amended) A method of transmitting data between a mobile node and a home agent for the mobile node, the mobile node having an associated authentication server, the method comprising:

establishing a first communication between a first packet data serving node (PDSN) and the mobile node located in a first network;

determining at a proxy server an address of the authentication server;

contacting the authentication server and, responsively, receiving information from which an address of the home agent for the mobile node may be determined;

determining the address of the home agent using the information received from the authentication server;

sending the address of the home agent from the proxy server to the first PDSN;

sending, from the authentication server to the proxy server, a methodology for determining a home address for the mobile node;

using, at the proxy server, the methodology to determine the home address for the mobile node;

sending the home address for the mobile node from the proxy server to the first PDSN;

sending, from the first PDSN to the home agent at the address of the home agent, a first registration request message for establishing a first registration between the first PDSN and the home agent; ~~and~~

routing the data from the mobile node to the home agent via the first PDSN~~.~~;

2. (Previously Presented) The method of claim 1 further comprising:

moving the mobile node to a second network, wherein the second network comprises a second PDSN;

establishing a second communication between the mobile node and the second PDSN;

re-determining at the proxy server the address of the authentication server for the mobile node;

re-contacting the authentication server and, responsively, receiving information from which the address of the home agent for the mobile node may be determined;

re-determining the address of the home agent;

sending the address of the home agent from the proxy server to the second PDSN;

sending, from the second PDSN to the home agent at the address of the home agent, a second registration request message for establishing a second registration between the second PDSN and the home agent; and

re-routing data from the mobile node to the home agent via the second PDSN.

3-4 (Canceled)

5. (Previously Presented) A system comprising:

a mobile node;

a wireless network coupled to the mobile node;

a packet data serving node (PDSN) coupled to the wireless network;

a proxy server coupled to the PDSN, the proxy server including a table comprising an address pool;

an authentication server coupled to the proxy server; and

a home agent coupled to the PDSN;

wherein the mobile node sends a access-request message to the wireless network, and the wireless network sends the access-request message to the PDSN;

wherein the PDSN forwards the access-request message to the proxy server;

wherein the proxy server determines the address of the authentication server;

wherein the authentication server receives the access-request message from the proxy server and, responsively, sends the proxy server information indicating (i) a first methodology of determining an address of the home agent, and (ii) a second methodology of determining a home address of the mobile node;

wherein the proxy server determines the address of the home agent using the first methodology and determines the home address of the mobile node using the second methodology;

wherein the proxy server sends the address of the home agent address and the home address of the mobile node to the PDSN; and

wherein a data message from the mobile node is thereafter forwarded to the home agent via the PDSN.

6. (Previously Presented) The system of claim 5 wherein the second methodology comprises determining the home address of the mobile node statically.

7. (Previously Presented) The system of claim 5 wherein the second methodology comprises determining the home address of the mobile node dynamically.

8. (Previously Presented) The system of claim 5 wherein the second methodology comprises determining the home address of the mobile node from the address pool.

9. (Original) The system of claim 5 wherein the network includes a PDSN.

10. (Previously Presented) The system of claim 5 wherein said mobile node subsequently moves to a second network and the address of the authentication server, the mobile node, and the home agent are re-determined.

11-20. (Canceled)

21. (Canceled)

22. (Currently Amended) The method of claim 1~~21~~, wherein the methodology comprises the authentication server sending the home address for the mobile node to the proxy server.

23. (Currently Amended) The method of claim 1~~21~~, wherein the methodology comprises the proxy server selecting the home address for the mobile node from a pool of addresses stored in the proxy server.

24. (Previously Presented) The method of claim 2, further comprising:

sending a resource reclaim message to the first PDSN from the proxy server;

sending a de-registration request message from the first PDSN to the home agent for the removal of active connection information at the home agent.

25-28. (Canceled).

29. The system of claim 5, wherein the PDSN sends the home address of the mobile node to the mobile node.

30. The system of claim 5, wherein the data message is forwarded by routing the data message.

31. The system of claim 5, wherein the data message is forwarded by tunneling the data message.

32. The system of claim 5, wherein the first methodology comprises the proxy server assigning the home agent address.

33. The system of claim 5, wherein the first methodology comprises the authentication server providing a value of the home agent address to the proxy server.

34. The system of claim 1, wherein the information indicates that the proxy server should assign the home agent address.

35. The system of claim 1, wherein the information comprises the authentication server providing a value of the home agent address to the proxy server.

36. (Canceled)